



1007-03

## In the United States Patent and Trademark Office

Serial Number: 10/614 580  
Appn. Filed: 2003 July 07  
Applicant(s): Carr, Michael Ray (Sr.)  
Appn. Title: Oilfield Tool Heating Element In-Line  
Examiner/GAU: \_\_\_\_\_

Mailed: 2003 Oct 06  
At: Minden, La.

## Information Disclosure Statement

Commissioner for Patents  
Washington, District of Columbia 20231

Sir:

Attached is a completed Form PTO-1449 and copies of the pertinent parts of the references cited thereon. Following are comments on any non-English-language references pursuant to Rule 98:

Canadian Patent 1,182,392, dated Feb. 12, 1985 in the name of Richardson et. al. discloses a nitrogen gas generation system to produce heat spike in a water-based brine solution. This is a form of hot oil treatment common in various methods in the industry. It, however, is not a preventative tool as is found in my current invention.

Very respectfully,

Applicant(s): Michael Ray Carr Sr.

Enc: PTO-1449 &amp; References

c/o: Michael Ray Carr, Sr.  
324 E. Union  
Minden, La 71055  
Telephone: 318-377-7612

## Certificate of Mailing

I certify that this correspondence will be deposited with the United States Postal Service as first class mail with proper postage affixed in an envelope addressed to: "Commissioner for Patents, Washington, DC 20231" on the date below.

Date: 2003 Oct 06 Michael Ray Carr Sr.

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FORM PTO-1449 (Substitute)

ATTY. DOCKET NO.

SERIAL NO.

10/614 580

## LIST OF PRIOR ART CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT

Carr, Michael Ray (Sr.)

FILING DATE

2003 July 07

GROUP

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
J	AA	47,410	April 1865	Fraser	166	302	
J	AB	231,287	Aug. 1880	Digman et al	392	301	
J	AC	457,457	Aug. 1891	Robison et al	392	305	
J	AD	522,737	July 1894	Lacock	219	630	
J	AE	573,142	Dec. 1896	Flanegin	166	303	
J	AF	762,628	June 1904	Gardner	392	306	
J	AG	766,313	Aug. 1904	Yogast	392	305	
J	AH	780,279	Jan. 1905	Gardner	166	60	
J	AI	784,454	Mar. 1905	Waring	392	305	
J	AJ	884,424	Apr. 1908	Seymour et al	166	60	
J	AK	972,308	Oct. 1910	Williamson	392	304	

## FOREIGN PATENT DOCUMENTS

J	AL	1182392	Feb. 1955	CA			
J	AM	2504157	Oct 1982	FR			
J	AN	1298354	Mar. 1957	SU			
J	AO	8810356	Dec 1988	WO			
J	AP						

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

J	AR	Denninger et al	1990	"Optimizing Hot Oiling/ Watering Jobs to minimize Formation Damage"	Petro Soc. of CIM/Soc. of Petro. Eng.		
J	AS	Wilson et al	Feb. 1959	"Oil Recovery by Thermal Methods"	Pt II The Petroleum Engineer		
J	AT	P.D. White et al	Sept. 1965	"High Temp. Thermal Techniques for Stimulating Oil Recovery"	J. of Petro. Tech. pp. 1007-1011		

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA	1,082,971	Dec 1913	Pick	392	303	
AB	1,095,365	May 1914	Williamson	392	305	
AC	1,169,262	Jan. 1916	Huff	392	304	
AD	1,232,736	Jul. 1917	Truman et al	392	305	
AE	1,360,404	Nov. 1920	Hollister et al	392	305	
AF	1,368,404	Feb. 1921	Loftus	392	305	
AG	1,383,670	Jul. 1921	Stephens	392	301	
AH	1,426,407	Aug. 1922	Pennington	392	304	
AI	1,450,658	April 1923	Warrick	392	301	
AJ	1,457,690	Jun. 1923	Brine	392	305	
AK	1,464,618	Aug. 1923	Pershing	392	305	

## FOREIGN PATENT DOCUMENTS

AL						
AM						
AN						
AO						
AP						

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	John Power	1928	Removing Paraffin Problem in Oil Wells with Electric Heater			
AS	R. Van A. Mills	Dec. 1923	"The Paraffin Problem in Oil Wells"			
AT	L.G.E. Bignall	1929	Electric Heaters Remove Paraffin			

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*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA	1,477,802	Dec. 1923	Beck	392	305	
AB	1,504,208	Aug. 1924	Brine	392	305	
AC	1,540,648	June 1925	Pershing	392	305	
AD	1,646,599	Oct. 1927	Schaefer	392	304	
AE	1,672,200	June 1928	Buck	166	60	
AF	1,690,994	Nov 1928	Powell	392	301	
AG	1,701,884	Feb 1929	Hogle	392	301	
AH	1,761,227	Jun 1930	Pasley	392	304	
AI	1,776,997	Sept. 1930	Dawney	392	305	
AJ	1,839,632	Jan. 1932	Agnew	392	305	
AK	2,222,034	May, 1940	Thomes	392	301	

## FOREIGN PATENT DOCUMENTS

AL						
AM						
AN						
AO						
AP						

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Frank V. Eaton	April 23, 1943	Applications of Heat Increases Production in Wyoming Field			
AS	H.E. Allen and R.K. Davis	April 1954	"Electric Formation Heaters and Their Application"			
AT	K.G. Parrent	May 1955	"Bottom Hole Heaters"			

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AA	2,208,087	Jul. 1940	Somers	392	301	
AB	2,244,256	Jun. 1941	Louman	392	301	
AC	2,260,916	Oct. 1941	Rial	392	305	
AD	2,332,708	Oct. 1943	Freeman	392	303	
AE	2,484,063	Oct. 1949	Ackley	392	304	
AF	2,500,305	Mar. 1950	Ackley	392	304	
AG	2,632,836	Mar. 1953	Ackley	392	304	
AH	2,660,249	Dec. 1953	Takosky	392	304	
AI	2,666,487	Jan. 1954	Bowman	392	301	
AJ	2,685,930	Aug. 1954	Albaugh	166	302	
AK	2,808,110	Oct. 1957	Spitz	392	304	

## FOREIGN PATENT DOCUMENTS

AL						
AM						
AN						
AO						
AP						

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	World Oil	May 1970	"A. C. Currents Heats Oil for Extra Recovery"			
AS	Dr. S. M. Faruq Ali	Oct 1978	"Well Stimulation by Down Hole Thermal Methods"			
AT	D. L. Carrans	Jan 1980	"Electrofluid Proves Technically Feasible"			

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AA	2,836,248	May 1958	Covington	392	302	
AB	2,998,066	Aug 1961	Nixon Sr.	166	304	
AC	3,163,745	Dec 1964	Boston	392	305	
AD	3,279,541	Oct. 1966	Knox et al	166	304	
AE	3,410,347	Dec. 1968	Triplett et al	166	302	
AF	3,437,146	April 1969	Everhart et al	166	304	
AG	3,614,986	Oct. 1971	Gill	166	303	
AH	3,828,161	Aug. 1974	Yamaguchi	392	485	
AI	3,943,330	Mar. 1976	Pollock et al	219	553	
AJ	4,026,358	May 1977	Allen	166	271	
AK	4,178,993	Dec. 1979	Richardson et al	166	312	

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AL						
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## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Edward T. Yukl	Aug 8, 1988	"Process Solves Paraffin Buildup in Tubing"			
	Andrew W. Marr Jr.					
AS	Petrotherm		Electric-Bottom-Hole Heating System			
AT						

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*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA	4,219,083	Aug 1980	Richardson et al	166	312	
AB	4,285,401	Aug 1981	Erickson	166	60	
AC	4,330,037	May 1982	Richardson et al	166	303	
AD	4,399,868	Aug 1983	Richardson et al	166	304	
AE	4,790,375	Dec. 1988	Bridges et al	166	304	
AF	4,911,239	Mar. 1990	Winckler et al	166	304	
AG	5,120,935	Jun 1992	Nenninger	392	305	
AH	5,247,994	Sept 1993	Nenninger	392	305	
AI	5,282,263	Jan 1994	Nenninger	392	305	
AJ	5,400,430	Mar 1995	Nenninger	392	305	
AK						

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